<u>Procedure for DSN Allocation and Planning Proposals</u>

During all phases of the DSN scheduling process, Proposal Initiators will generate proposals, in the format specified below, to obtain and/or de-conflict DSN tracking. Proposals can either be proposed verbally or electronically in 'plain text' format. Proposals are generated to request additional track time due to changes in requirements, to delete coverage, to confirm changes in tracks (i.e.: move to a different antenna), to support special activities (including spacecraft safing), to negotiate extended antenna downtimes and maintenance and/or for conflict resolution.

As a DSN Proposal Initiator, the following procedure will be followed for all electronic proposals. For any verbal proposals and/or negotiations, steps 5-7 still apply.

- 1. When presenting a proposal, the initiator shall email all involved flight project primary scheduling representatives and their backups, with a descriptive reason for the requested changes, including impact and/or changes for all parties involved.
- 2. Each Project Schedule Engineer involved in the proposal shall provide acknowledgment of receipt, acceptance, rejection and/or a counter proposal via email and cc all parties involved, within 12 business hours. In special circumstances whereby the nominal 12 hour response time is not sufficient, the initiator must properly document the desired response time, at the top of the proposal.
- 3. The initiator shall email all parties involved with a status of the proposal, listing pending project response(s). Notification should be sent out at least twice a week on pending proposals.
- 4. Upon response from all involved parties, the initiator of the proposal shall send a final status email stating whether the proposal has been accepted or rejected. (See example below.)
- 5. If all parties accept the proposal, the initiator shall notify all parties involved how the schedule changes will be submitted to DSN Scheduling or RAPSO. (I.e., Will the initiator submit all of the changes or will each party submit their own individual changes.)
- 6. This will be based on the response(s) of all parties involved.) If the initiator of the proposal does, not submit all changes being proposed in a single proposal, in order to avoid rejection or confusions a comment must be made at the top of the proposal indicating which project(s) will be submitting their own changes. All changes must be submitted within one (1) working day.
- 7. If the initiator submits all of the agreed upon changes, all parties involved need to be on distribution for the submission. All parties must verify that their submitted changes are correct.
- 8. After changes are submitted, RPS RAP and/or RPS DSN Scheduling will provide a confirmation of submitted changes per the following: RPS DSN Scheduling sends an automatic response (confirmation) to the

person who sends in the schedule change only; therefore the initiator of the schedule change is responsible for notifying all parties involved once the schedule change has been accepted and incorporated into the schedule RPS-RAP will send a confirmation of submitted changes to all parties included.

Proposal Format

Proposal Initiators shall enter the information necessary to support the event they are suggesting a proposal for in the C1/C2/C_n format, containing the following 13 fields. [C_n is for subsequent proposal changes.] Of the 13 fields the following are required, DOY SOA-EOA ANT PROJ, in addition to the identify fields which are being proposed for change.

Original Event

C1 DOY SOA-EOA ANT PROJ ACT PASS SETUP BOT EOT TEARDOWN CNF/SOE WRK

Affected Changes to Original Event

C2 DOY SOA-EOA ANT PROJ ACT PASS SETUP BOT EOT TEARDOWN CNF/SOE WRK (Only the affected fields are indicated in C2)

Deletion of Event

D DOY SOA-EOA ANT PROJ ACT PASS SETUP BOT EOT TEARDOWN CNF/SOE WRK

Addition of Event

A DOY SOA-EOA ANT PROJ ACT PASS SETUP BOT EOT TEARDOWN CNF/SOE WRK

DOY (Day of Year) – always and only 3 numeric characters: 001-366

SOA (Start of Activity) - always and only 4 numerical characters: 0000-2359

EOA (End of Activity) - always and only 4 numerical characters: 0000-2359

ANT (Antenna) – always and only 2 numeric characters: 14, 26, 34, 55, 63, 65

PROJ (Project) - can be either 3 or 4 alphanumeric characters: DSS, M01O, MGS

ACT (Activity) – any number of characters up to 16 (commas are not allowed)

PASS (Pass Number) - can be 4 numeric characters, NIB or leave blank if no pass # is needed or required at time of submittal. Pass numbers are required for all real-time submissions involving spacecraft.

SETUP (Time) - always and only 3 numeric characters; 030, 100, 145, 200, 215

BOT (Beginning of Track) - always and only 4 numerical characters: 0000-2359

EOT (End of Track) - always and only 4 numerical characters: 0000-2359

TEARDOWN (Time) – always and only 3 numeric characters; 000, 010, 015, 030, 045

CNF (Configuration Code) – always and only 4 characters. Use NONE if the activity does not require schedulable equipment. (Updates are provided by the DSN Scheduling analyst.)

SOE (Sequence of Events) – always and only 1 character. Can be an SOE identifier, a hyphen (-) or blank.

WRK (Work Category Code) – always and only 3 characters

(See MSPE/DSN Scheduling Web site: http://dsnonline.jpl.nasa.gov/spg)

activity does not require schedulable equipment. (Updates are provided by the DSN Scheduling analyst.)

Subject Line Format

WK XX Proposal (PROJ/PROJ/PROJ/PROJ) Rationale

Basic C1/C2 Example

C1 261 1535-2245 26 MEX MU11 1905DN007 145 1720-2230 015 N002 1A1

C2 1620- TKG PASS 100

D 261 1905-2120 26 MER2 MU22 030 1935-2120 000 N701 1A1

A 261 1905-2120 26 MER2 MU22 030 1935-2120 000 N701 1A1

Proposal Email Example

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Subject: WK 29/30 Proposal (Maintenance/M010/MGS/MEX/MER2) Clear Mars
Conflicts
Hi All,
PROPOSAL RATIONALE OR JUSTIFICATION.
On behalf of M010, please consider the following proposals to clear many
of the Mars conflicts in WKs 29/30 due to the DSS-65 extension.
STATUS:
    Maint. - Concurred, R.B. 2/8
    MGS - Pending
    MEX - Pending
    MER2 - Concurred, J.C. 2/4
WK 29:
======
C1 199 0140-1000 65 MEX
                           MA11
                                           130 0310-1000 000 N004 1A1
                                                              N002
C1 199 0140-1045 65 MGS
                           MAX2
                                           130 0310-1030 015 N711 1A1
                 55
                                                              N707
C1 199 0600-1400 55 DSS MAINTENANCE
                                           000 0600-1400 000 NONE 2A1
C2 200
(Since there won't be any DSS-65 maintenance on Tuesday)
C1 200 2230-0810 65 MGS
                           MJ12 0530DN711 200 0030-0810 000 N704 1A1
C2
                 55
                           MJ12 0530DN707
                                                              N702
C1 201 0230-1015 65 MEX
                           MJ21 0530UN004 030 0300-1000 015 N011 1A1
C2
                 55
                           MJ21 0530UN002
C1 202 0130-0810 65 MGS
                                           130 0300-0810 000 N711 1A1
                           MPX2
C2
                                                              N707
                 55
C1 202 0130-0835 65 MEX
                           MP11
                                           130 0300-0820 015 N004 1A1
                                                              N002
                                           130 0300-1000 015 N004 1A1
C1 203 0130-1015 65 MEX
                           MT11
C2
                 55
                                                              N002
C1 203 0130-1015 65 MGS
                           MTX2
                                           130 0300-1000 015 N711 1A1
C2
                                                              N707
                 55
C1 203 2245-0810 65 M010
                           MI11 0300DN011 145 0030-0755 015 N004 1A1
C2
                           MI11 0300DN007
                 55
C1 204 0300-0810 65 MER2
                           MI22
                                           030 0330-0755 015 N710 1A1
C2
                 55
                                                              N701
C1 204 2220-0805 65 M010
                           MM12 0220DN011 200 0020-0805 000 N004 1A1
C2
                 55
                           MM12 0220DN007
                                                              N002
C1 205 0220-1015 65 MEX
                           MM21
                                           030 0250-1000 015 N004 1A1
                                                              N002
C2
                 55
C1 205 2250-1025 65 MGS
                           MBX2
                                           130 0020-1010 015 N711 1A1
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C2		55				N707	
WK 30:							
C1 206 C2	0225-1025	65 MEX 55	MB11	030	0255-1010	015 N004 N002	
C1 206 C2 207	0600-1400	55 DSS	MAINTENANCE	000	0600-1400	000 NONE	2A1
(Since there won't be any DSS-65 maintenance on Tuesday)							
C1 208 C2	0115-0950	65 MGS 55	MIX2	130	0245-0950	000 N711 N707	
C1 208 C2	0115-1015	65 MEX 55	MI11	130	0245-1000	015 N004 N002	
C1 208 C2	2200-1005	65 MGS 55	ML12 0315DN711 ML12 0315DN707		0000-0950	015 N704 N702	
Thanks, M010 Project Scheduler							

Setting Up Your Email Application

The easiest way to make sure the C1/C2 format reads well on the recipients e-mail application, is to send the e-mail in 'plain text' format. Most applications will allow you choose the format while composing the e-mail (before you send), and most will let you set 'plain text' as a default format. Other available formats such as HTML and Rich Text format are not compatible with fixed width tables like the C1/C2 format, and should not be used.

It's also necessary to set-up how plain text messages are read. A 'fixed width' font is necessary in order for the C1/C2 format to line up. That is, all characters need to print the same width including spaces and short letters (like I, i, v, etc). In some applications a checkbox for fixed width fonts can be selected, while in other applications the user needs to pick a font from the list that will be formatted with a fixed width, like Courier. Font size shouldn't matter for viewing, as long as the font being used is all the same size.